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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/798,632

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Michael V. Shuman

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10/30/2006

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EXAMINER

HUFFMAN, BRIAN GEORGE

ART UNIT

PAPER NUMBER

3709

DATE MAILED: 10/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,632

Applicant(s)

SHUMAN ET AL.

Examiner

Brian G. Huffman

Art Unit

3709

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :06/21/04, 08/20/2005, 09/26/2005.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "134" has been used to designate both a "computing platform" in Figs. 2, 4 and 5 and a "computer game" in Fig. 7.
2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (process) 202 on page 7, line 27; (geographic database)118 on page 11, line 24.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The attempt to incorporate subject matter into this application by reference to "Method and System for using Geographic Data in Computer Game Development" (Page 1, lines 6-7; Page 11, lines 25-26), "Application Programming Interface for Geographic Data in Computer Games" (Page 1, lines 7-9; Page 17, lines 6-7) and "Computer Game Development Factory System and Method" (Page 1, lines 9-10) is ineffective because the references are referred to by an Attorney docket number, which is improper because it does not clearly identify the reference as per MPEP 608.01(p)(b)(2). The references should be referred to by appropriate U.S. Serial numbers such as an application number and the present status of the applications should be given.

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The incorporation by reference will not be effective until correction is made to comply with 37 CFR 1.57(b), (c), or (d). If the incorporated material is relied upon to meet any outstanding objection, rejection, or other requirement imposed by the Office, the correction must be made within any time period set by the Office for responding to the objection, rejection, or other requirement for the incorporation to be effective. Compliance will not be held in abeyance with respect to responding to the objection, rejection, or other requirement for the incorporation to be effective. In no case may the correction be made later than the close of prosecution as defined in 37 CFR 1.114(b), or abandonment of the application, whichever occurs earlier.

Any correction inserting material by amendment that was previously incorporated by reference must be accompanied by a statement that the material being inserted is the material incorporated by reference and the amendment contains no new matter. 37 CFR 1.57(f).

Claim Objections

4. Claims 2, 3, 19 and 25 are objected to because of the following informalities:

Re claims 2 and 3: each claim should commence with a period.

Re claim 19: "as" between "includes" and "road" in line 3 should be deleted.

Re claim 25: -- geographic -- should be inserted between "template" and "database" in line 2 to be consistent with the claim language recited in line 4.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-5, 12-16, 23, 24 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Graf et al. (US 4,645,459).

Re claim 1: Graf discloses a method of using a source database/object library data base for forming derived products, wherein the source database contains data that represent geographic features in a region including roads in the region, the method comprising: providing a first set of data/image(s) from the source database/object data base, wherein the first set of data represents at least some of the geographic features in the region and further wherein the first set of data includes attributes suitable for use for providing navigation-related functions; and using data from the source database to form a template database/gaming area data base, wherein the template database represents an imaginary locale (Fig. 3-12; Col. 4, lines 39-45; Col. 5, lines 19-24 and 47-51; Col. 6, lines 38-48; Col. 8, lines 44-49). With respect to applicant's "attributes suitable for use for providing navigation-related functions," Graf discloses a database made up of high quality images of actual surfaces or objects. As such, the invention of Graf is considered to have the capability of providing navigation-related functions in that it presents the user with a high quality, realistic representation of a real-world environment through the reproduction of these images, which could be used to guide a user through an environment.

Graf further discloses the following:

Re claim 2: the template database includes data that provides a level of accuracy similar to a level of accuracy provided by the first set of data used for navigation-related functions (Col. 6, lines 54-58 and 67-68). Graf discloses that "near perfect" images (i.e. applicant's template database) are formed the from data stored in the object library data base, where "'near perfect'

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means high fidelity with respect to the quality of the input image." By definition a high fidelity image is of similar quality to the original with minimal distortion, and therefore the images created by the invention of Graf are considered to be of a similar level of accuracy as the source images.

Re claim 3: the template database includes data that provides a level of detail similar to a level of detail provided by the first set of data used for navigation-related functions (Col. 5, lines 6-9).

Re claim 4: the step of using data from the source database to form a template database further comprises the steps of: selecting a real world locale; obtaining data that represents the real world locale, wherein the data that represents the real world locale is obtained from or derived from the source database; using the data that represents the real world locale to determine at least one parameter (such as land or water features, as depicted in Fig. 1) of geographic features represented thereby; and forming the template database using the parameter (Fig. 1; Col. 5, lines 19-46).

Re claim 5: the parameter includes an overall size of the locale (Col. 4, lines 41-45).

Re claim 12: the parameter includes altitude changes (Fig. 5; Col. 5, lines 39-42). Fig. 5 depicts a scene of mountains and foothills, which represent various different altitudes, and therefore altitude changes.

Re claim 13: the parameter includes geographic features selected from a group consisting of: lakes, rivers, and mountains (Fig. 1).

Re claim 14: the parameter includes open spaces in a locale selected from a group consisting of: parks and golf courses (Fig. 1). Fig. 5 depicts an open area in the center of the image consisting

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of trees, a river, open grass area and a road with a bridge over the river, which is considered to be an equivalent of applicant's "park."

Re claim 15: the parameter includes points of interest (Fig. 9; Col. 6, lines 8-9). The building depicted in Fig. 9 may be a house of historical importance and is therefore considered to be an equivalent of applicant's "points of interest."

Re claim 16: the parameter includes buildings located in a locale (Fig. 9; Col. 6, lines 8-9).

Re claim 23: the data in the template database is combined with other game-related components/tank or car to form computer games/simulation (Fig. 8; Col. 6, lines 3-7; Col. 13, lines 60-63).

Re claim 24: the data in the template database is combined with other game-related components/tank or car to form computer games/simulation, wherein the other game-related components include at least one of a group consisting of: characters, game logic, vehicles, game rules and programs for rendering and graphics (Fig. 8; Col. 6, lines 3-7; Col. 13, lines 60-63).

Re claim 28: Graf discloses a method of developing a computer game comprising: providing template geographic databases/object library data base to end users/operator, wherein the template databases contain data that represents geographic locales; and providing programming tools to the end user that allow the end users to incorporate data from the template geographic database into computer games/simulation, wherein the computer games include playing scenarios that include representations of the geographic locales (Col. 10, lines 7-31).

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 25 and 27 rejected under 35 U.S.C. 102(e) as being anticipated by Lechner (US 2003/0059743 A1).

Re claim 25: Lechner discloses a method of developing a computer game comprising: acquiring a template database from another party (52,54), wherein the template database contains data that represents a geographic locale; incorporating data from the template geographic database (as depicted in Fig. 2), along with other computer game components (80), to form a computer game product/flight simulator (36); and selling the computer game product (Fig. 1, 2, 4 and 5; Para. [0029]; Para. [0041]; Para. [0051], lines 1-7; Para. [0056], lines 1-3). With respect to applicant's step of selling the computer game, though not explicitly disclosed by Lechner, it would be inherent to sell a developed computer game/flight simulator in order to recoup the expenses of developing the game.

Re claim 27: Lechner further discloses that the geographic locale is an actual locale (as depicted in Fig. 2) (Para. [0007], lines 1-8).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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10. Claims 6-11 and 17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf in view of Huston et al. (US 6,146,143). The teachings of Graf have been discussed above.

Re claim 6: However, Graf fails to disclose that the parameter includes road densities.

As rural roads are conventionally less densely located than city roads, the database of Huston is considered to have used the parameter of road densities in the step of forming the template database.

Re claim 7: However, Graf fails to disclose that the parameter includes road shapes.

As rural roads are typically built around the features of the environment, they generally consist of a large number of curves and direction changes, whereas city roads may be built in a grid type layout consisting of many intersecting substantially straight roads. Therefore, the database of Huston is considered to have used the parameter of road shapes in the step of forming the template database.

Re claim 8: However, Graf fails to disclose that the parameter includes road widths.

Rural roads are conventionally one or two lane roadways whereas highways are major roads which often consist of four or more lanes. As such, the database of Huston is considered to have used the parameter of road widths in the step of forming the template database.

Re claim 9: However, Graf fails to disclose that the parameter includes expressway density.

An environment which includes mostly rural roads may have few or no expressways/highways and a corresponding low expressway density, whereas a city environment (as represented by an area a large quantity of city streets) generally includes a larger number of expressways to connect the city with other major cities and provide easy access to and from the city center, and would have a correspondingly greater expressway density. Therefore, the database of Huston is

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considered to have used the parameter of expressway density in the step of forming the template database.

Re claim 10: However, Graf fails to disclose that the parameter includes roadway orientation.

West coast city streets are often aligned in grid patterns where as rural roads have a more random orientation, and as Huston teaches the database having city streets and rural roads, the database is considered to have used the parameter of roadway orientation in the step of forming the template database.

Re claim 11: However, Graf fails to disclose that the parameter includes road alignment.

Highways generally have on and off ramps that intersect the highway at an acute angle, where as city streets aligned in a grid typically intersect each other at right angles. As such, Huston teaches the inclusion of both types of roads in the database and the database is considered to have used the parameter of road alignment in the step of forming the template database.

Re claim 17: However, Graf fails to disclose that the parameter includes signs.

Huston teaches the use of objects in the simulated environment including traffic lights and other traffic events that the user must respond to and follow. As all roadways include signage of some sorts, generally to control the actions of the users of these roads, and further in that a traffic light is a form of traffic control which may act as a sign or signal, the database of Huston is considered to have used the parameter of signs in the step of forming the template database.

Re claim 18: However, Graf fails to disclose that the data in the template database is combined with road model data to provide a realistic visual appearance of roads in the imaginary locale.

Huston teaches that the database may be separated into a number of smaller databases, therefore the data of features associated with the roadway types could be provided in another

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database(s) and could be combined with the database representing the roadway network itself (Fig. 4-7; Col. 4, lines 49-50).

Re claim 19: However, Graf fails to disclose that the data in the template database is combined with road model data to provide a realistic visual appearance of roads in the region, wherein the road model data includes as road pavement colors, lane stripe markings, curbs, sidewalks, signs, lampposts, lane dividers, traffic signals, speed bumps, and crosswalks.

Huston teaches that the roadway network includes features such as: road pavement colors, lane stripe markings, curbs, sidewalks and traffic signals (as depicted in Fig. 4-7; Col. 5, lines 9-14; Col. 10, lines 38-67). With respect to applicant's road pavement colors, Huston teaches that the road surface may be modeled with different colors depending on specific weather conditions (i.e. rain or snow), and therefore the invention of Huston is considered to be capable of presenting different colors of pavement to correspond to a darker (i.e. if rain has just fallen, or if new pavement is present) or lighter (i.e. snow covered or old) surface. With respect to applicant's signs, lane dividers, lampposts, speed bumps and crosswalks, though Huston doesn't explicitly disclose these features, they are commonly associated with city street networks as disclosed, are included in numerous other video games (i.e. The Need for Speed, Gran Turismo I, etc.) and, as such, are well known in the art.

Re claim 20: However, Graf fails to disclose that the data in the template database is combined with 3D model data to provide a realistic visual representation of polygon shaped features in the region.

Huston teaches that the 3D model data/visual image or "texture" is mapped onto the polygons of the features of the roadway to create an accurate simulation (Fig. 4-7; Col. 10, lines 54-58).

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Re claim 21: However, Graf fails to disclose that the data in the template database is combined with 3D model data to provide a realistic visual representation of cityscape and landscape features in the region.

Huston teaches that the 3D model data/visual image or "texture" is mapped onto the polygons of the features of the terrain to create an accurate simulation (Fig. 4-7; Col. 10, lines 54-58).

Re claim 22: However, Graf fails to disclose that the data in the template database is combined with 3D model data to provide a realistic visual representation of one of a group consisting of: buildings, fences, trees, shrubbery, lawns, fences, and clouds in the region.

Huston teaches that the 3D model data/visual image or "texture" is mapped onto the polygons of the features of the terrain, including buildings (as depicted in Fig. 4-7), to create an accurate simulation (Col. 10, lines 54-58).

Graf and Huston are considered to be analogous art because both inventions relate to the same field of endeavor of vehicle simulators.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the database and associated simulation of Graf with the additional database features of Huston in order to accurately simulate vehicular operation in changing weather conditions and to provide a detailed, realistic image (Huston, Col. 2, lines 47-50; Graf, Col. 5, lines 6-9). Thus it would have been obvious to combine Graf with Huston to obtain the invention as specified in claims 6-11 and 17-22.

11. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lechner in view of Graf. The teachings of Lechner and Graf have been discussed above.

Re claim 26: However, Lechner fails to teach that the geographic locale is an imaginary locale. Graf teaches that the simulated locale may be an imaginary location.

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Lechner and Graf are considered to be analogous art because both inventions relate to the same field of endeavor of vehicle simulators.

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method of Lechner with the imaginary location of Graf in order to provide a new or different environment for the pleasure of the user (Lechner, Para. [0029], lines 4-8). Thus it would have been obvious to combine the Lechner with Graf to obtain the invention as specified in claim 26.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kurosawa et al. (US 6,171,186) discloses a game processing method, game device, image processing device, image processing method, and recording medium. Arye et al. (US 5,823,780) discloses an apparatus and method for simulation. Artwick (US 5,651,676) discloses a method of organizing and storing simulated scenery in a flight simulation system. Santodomingo et al. (US 7,038,694) discloses an automatic scenery object generation. Langlais et al. (US 5,184,956) discloses a method and device for training in the driving of vehicles. Copperman (US 5,660,547) discloses a scenario development system for vehicle simulators. Oshige (JP 06202557) discloses an electronic map display device.

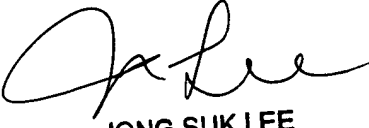
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian G. Huffman whose telephone number is (571) 270-1348. The examiner can normally be reached on 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong-Suk (James) Lee can be reached on (571) 272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BGH



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SUPERVISORY PATENT EXAMINER